APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/539,637	03/30/2000	Fong-Shek Lam	10559/170001/P8263	8485

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EXAMINER
WALLACE, SCOTT A

ART UNIT	PAPER NUMBER
2671	

DATE MAILED: 11/25/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _18 July 2002_ .

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) _____ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-23_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____ .

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
          application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)   4)☐ Interview Summary (PTO-413) Paper No(s). _____ .

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)   5)☐ Notice of Informal Patent Application (PTO-152)

3)☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .   6)☐ Other: .

1.   Applicant's arguments with respect to claims 1 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3.   Claims 1-5, 8-17, 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kansal et al., U.S. Patent No. 5,657,055 in view of Eldridge et al., U.S. Patent No. 6,272,252 B1.

6.   As per claims 1 and 22, Kansal et al discloses a method comprising:

setting an indicator (watermark) in a buffer (FIFO) (fig 3 and column 1 lines 49-55);

reading pixel data for a current video line from the buffer(FIFO) (column 1 lines 49-55);

determining when the pixel data reaches the indicator(watermark) (column 1 lines 49-55); and

loading data for the next video line into the buffer (FIFO) (fig 8).

However, Kansal et al does not disclose using a line buffer. This is disclosed in Eldridge et el in column 4 lines 20-31. Since Kansal and Eldridge are both systems with FIFO's with some type of indicator, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the line FIFO of Eldridge with the system of Kansal because FIFO only take lines of data. The system of Kansal takes lines of data from the frame buffer and puts into a FIFO for subsequent input to the display.

7.   As per claims 2 and 23, Kansal et al discloses further comprising setting the indicator (watermark) at approximately a middle of the buffer (fig 3).

8.   As per claim 3, Kansal et al discloses further comprising loading data for the next video line to replace data for the current video line in the buffer (column 1 lines 49-55).

9.   As per claim 4, Kansal et al discloses further comprising processing the current video line data for display (column 1 lines 49-55).

10.   As per claim 5, Kansal et al discloses further comprising displaying the processed video line data (column 1 lines 49-65).

11.   As per claim 8, Kansal et al discloses reading video data for a current video line from a buffer (column 1 lines 49-65); detecting the position in the buffer the video data is located (column 1 lines 49-65); loading data for the next video line into the buffer when the video data for the current video line is located at a predetermined position (column 1 lines 49-65).

12.   As per claim 9, Kansal et al discloses further comprising setting the predetermined position at a position before all the current video line data is read (column 1 lines 49-65).

13.   As per claim 10, Kansal et al discloses further comprising setting the predetermined position at approximately a midpoint of the buffer (fig 3).

14.   As per claim 11, Kansal et al discloses further comprising loading data for the next video line to replace data for the current video line in the buffer (column 1 lines 49-65).

15.   As per claim 12, Kansal et al discloses further comprising processing the current video line data for display (column 1 lines 49-65).

16.   As per claim 13, Kansal et al discloses further comprising displaying the processed video line data (column 1 lines 49-55).

17.   As per claim 14, Kansal et al discloses a buffer having a plurality of memory locations (column 1 lines 49-65), the buffer adapted to provide data to a display (column 1 lines 63-64); and an indicator positioned at a predetermined memory location in the buffer (fig 3 and column 1 lines

49-55), wherein the buffer begins to read data for a next video data line when the line buffer

provides data from the indicator memory location (column 1 lines 49-65).

18.   As per claim 15, Kansal et al discloses further comprising graphic memory which provides the

video pixel data to the buffer (fig 4).

19.   As per claim 16, Kansal et al discloses wherein the buffer provides data to the display for a

current video line (column 1 lines 49-65).

20.   As per claim 17, Kansal et al discloses wherein the indicator is located at a position at

approximately a midpoint of the line buffer (fig 3).

21.   Claims 6-7 and 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kansal et

al. in view of Eldridge et al. in further in view of Butler et al., U.S. Patent No. 5,739,868.

22.   As per claim 6, the combination of Kansal and Eldridge fail to disclose further comprising creating

a video overlay from the processed video line data. Butler discloses this in column 1 lines 19-24. It would

have been obvious to one of ordinary skill in the art at the time the invention was made to use the video

overlay of Butler with the combined system of Kansal and Eldridge because this would have allowed

superimposing the video over other images.

23.   As per claim 7, the combination of Kansal and Eldridge fail to disclose further comprising

positioning the pixel data on an active display to create a video overlay. However, Butler discloses this in

column 1 lines 19-24. It would have been obvious to one of ordinary skill in the art at the time the

invention was made to use the video overlay of Butler with the combined system of Kansal and Eldridge

because this would have allowed superimposing the video over other images.

24.   As per claim 18, the combination of Kansal and Eldridge disclose a display system comprising:

        Video memory which stores video data (column 1 lines 49-65);

        A processing engine comprising: a line buffer which receives the video data from the memory

(column 1 lines 49-65), wherein said line buffer includes an indicator positioned at a

predetermined memory location in the line buffer (fig 3 and column 1 lines 49-65); video

processing circuitry for preparing the video data in the line buffer to be displayed (column 1 lines 49-65); and a display which receives the processed data from the processing engine (column 1 lines 49-65), wherein the line buffer begins to read data for a next video data line when the line buffer provides a predetermined amount of data to the display for a current video line (column 1 lines 49-65).

However, the combination of Kansal and Eldridge fail to disclose an overlay processing engine. This is discloses in Butler in column 1 lines 19-24. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the video overlay of Butler with the combined system of Kansal and Eldridge because this would have allowed superimposing the video over other images.

25.   As per claim 19, Kansal et al discloses wherein the predetermined amount of data is approximately half the data comprising the current video data line (column 1 lines 49-65 and fig 3)

26.   As per claim 20, Butler discloses wherein the overlay processing engine provides data to the display to create a video overlay (column 1 lines 19-24).

27.   As per claim 21, Butler discloses wherein the video processing circuitry includes pixel color conversion and adjustment (column 3 lines 28-33).

28.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Scott Wallace** whose telephone number is **703-605-5163**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Mark Zimmerman**, can be reached at 703-305-9798.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

MARK ZIMMERMAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600